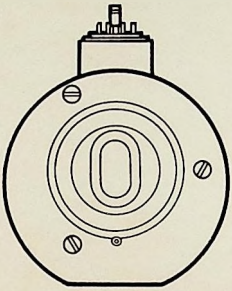
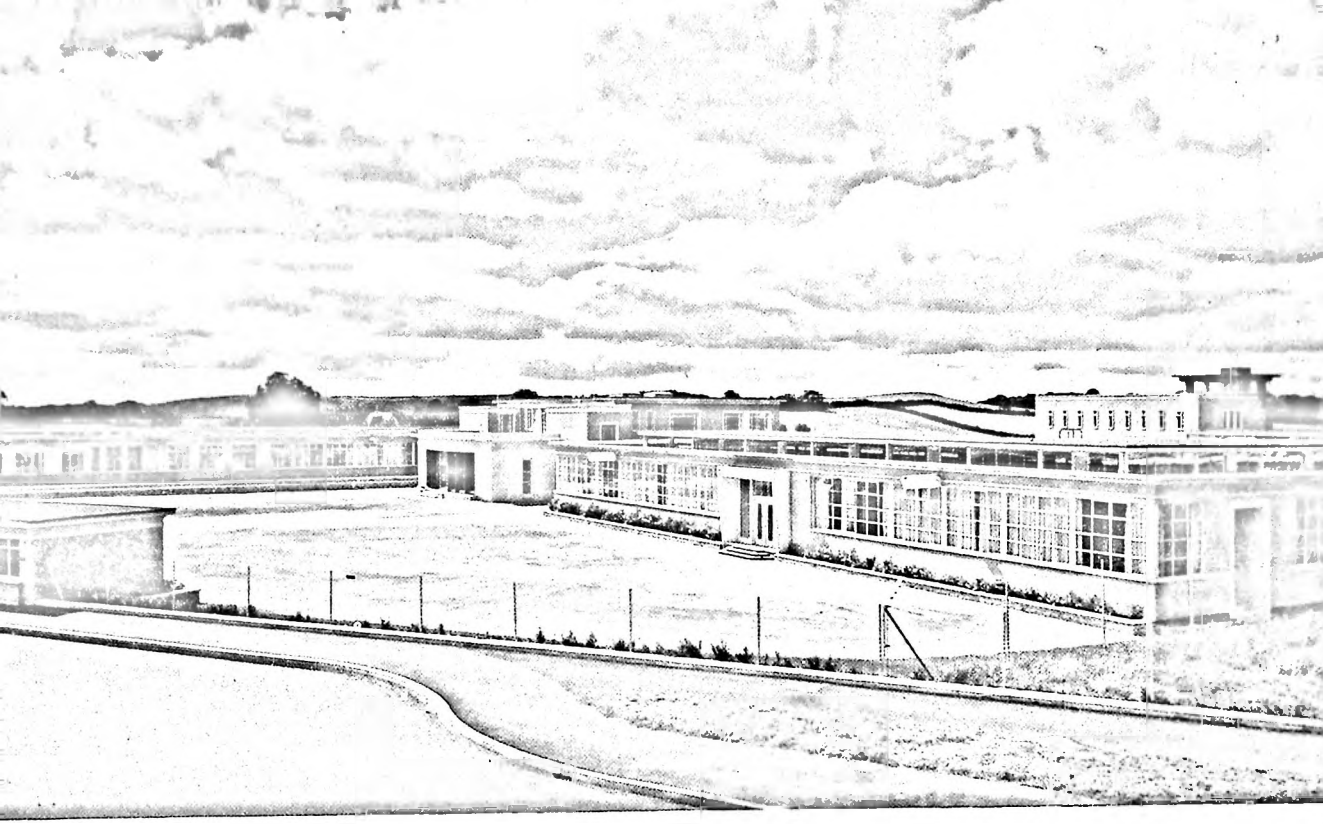
MS/115 Ed.2



STC valves

EDITION 2

Standard Telephones and Cables Limited



STC Valve Division, Paignton

Edition 2
(1962)

STC valves

THE OBJECT OF THIS BROCHURE *is to provide customers with abridged data on the wide range of valves available for use in telecommunication, electronic and industrial equipments, including:—*

MICROWAVE VALVES FOR RADAR AND S.H.F. MULTI-CHANNEL TELEPHONY AND TELEVISION LINKS.

COLD-CATHODE GAS TUBES FOR SPECIAL ELECTRONIC APPLICATIONS.

HIGH AND LOW POWER VALVES FOR BROADCASTING, TELEVISION, COMMUNICATION, AIRCRAFT NAVIGATIONAL AIDS AND INDUSTRIAL EQUIPMENTS.

A comprehensive technical data service embracing the valves listed in this publication is available and customers are invited to apply for any further information required.

Standard Telephones and Cables Limited
COMPONENTS GROUP
VALVE SALES DEPARTMENT
FOOTSCRAY, SIDCUP, KENT
Telephone: Footscray 3333

The valves listed are manufactured in the Company's modern factory at Paignton, Devon, where exceptionally clean working conditions are maintained for the various processes of manufacture, assembly and testing. Furthermore, a large number of the types listed are of proven reliability by virtue of their continuous service in " Standard " equipments and installations the world over.

The factory area includes well-equipped laboratories, several of which are devoted exclusively to the design of high and low power valves, gas tubes and microwave valves. In support, are a Development Section, a large Model Shop and a Materials Laboratory, together with an Applications Section where the characteristics and operation of the products are investigated and an information service provided for the benefit of customers.

The Materials Laboratory, which serves the whole factory, comprises Analytical, Metallurgical and Process Development Sections. A high quality of raw materials is maintained by analytical inspection, whilst quality control in metal forming operations is the special responsibility of the Metallurgical Section. Process development, with particular emphasis on the elimination of trace contaminants from valve components, covers a wide range of chemical and electro-chemical techniques.

In the same wing is a special dust-free area devoted exclusively to the production of the well-known submerged-repeater valves now being used in submarine telephone cable systems in many parts of the world. Reliability is absolutely essential for these repeaters and this is secured by manufacture and assembly under the best possible conditions of cleanliness, and maintenance of the highest standards of design and workmanship. Operators working in this area wear special clothing.

A comprehensive technical data service embracing the valves listed in this brochure is available, and customers are invited to apply for any further information required. Full details of ratings and characteristics of STC valves are included in the *STC Components Handbook* which is distributed with an addition and amendment service.

CONTENTS

Rectifiers 1

Thyratrons 2

Low Power Valves 3

High Power Transmitting Valves 4

High Power Industrial Heating Valves 5

Microwave Valves & Pulse Modulators 6

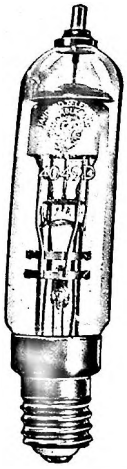
Cold Cathode Tubes 7

Vacuum Capacitors, Lamps, Manometers & Thermal Delay Switches 8

STC Current List & C.V. Codes 9

STC Equivalents 10

Rectifiers

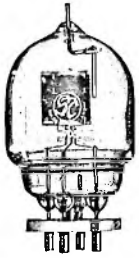


4049D

4B32

866A

3B28



705A

Vacuum Rectifiers

Commercial Code	CV Number	American Equivalent	Base	Dimensions		Cathode	Filament		Max. P.I.V.	Peak I_a	Av. I_a	D.C. Output Half-wave Bi-phase	
				Overall Length (mm)	Max. Diameter (mm)		V	A	kV	A	A	kV	A
2J/262E	—	—	Coaxial	235	92·1	TTF	5	40	50	7·5	1·5	15	3
705A	3587	705A	B4A	128·6	65·1	TTF	5	5	30	0·4	0·1	9	0·2

Gas-Filled Rectifiers

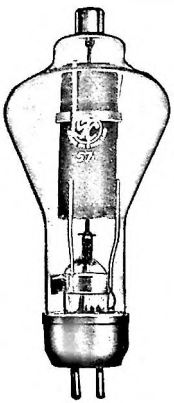
Commercial Code	CV Number	American Equivalent	Base	Dimensions		Cathode	Filament		Max. P.I.V.	Peak I_a	Av. I_a	D.C. Output Half-wave Bi-phase	
				Overall Length (mm)	Max. Diameter (mm)		V	A	kV	A	A	kV	A
2G/241L	—	—	End Caps	59·5	19·1	CC	—	—	2·8	0·1	0·012	0·85	0·024
3B28	1835	3B28	American Medium 4-pin bayonet.	162	52·6	OCF	2·5	5·0	10	1	0·25	3·2	0·5
4B32	2518	4B32	B4F	216	59	OCF	5·0	7·5	10	5	1·25	3·2	2·5
2G/473C	2399	—	Goliath Edison Screw.	258	60	OCF	4	11	13	6	1·25	4·1	2·5
2G/474C	—	—		241	59	OCF	4	7	13	5	1·25	4·1	2·5

Mercury-Vapour Rectifiers

Commercial Code	CV Number	American Equivalent	Base	Dimensions		Cathode	Filament		Max. P.I.V.	Peak I_a	Av. I_a	D.C. Output Half-wave Bi-phase	
				Overall Length (mm)	Max. Diameter (mm)		V	A	kV	A	A	kV	A
866A	32	866/866A	American Medium 4-pin bayonet.	170	62	OCF	2·5	5	10	1·0	0·25	3·2	0·5
872A	1449	872/872A	B4F	216	62	OCF	5	7·25	10	5	1·25	3·2	2·5
2V/474C	1629	F353A	Goliath Edison Screw.	241	60	OCF	4	7	13	5	1·25	4·1	2·5
4049D	5	—		270	63	OCF	4	11	20	5	1·25	6·3	2·5
2V/520A	—	6693	B4D	265	75	OCF	5	12	15	12	3·0	4·8	6·0
2V/531E	1420	(near)	Special 2-pin.	412·8	95·3	OCF	5	20	20	10	2·5	6·3	5
2V/561E	—	—		539·8	133·4	OCF	5	40	20	20	7·5	6·3	12·5

Thyratrons

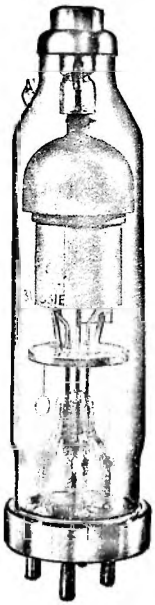
2D21



57

6807

4049GD



3V/531E

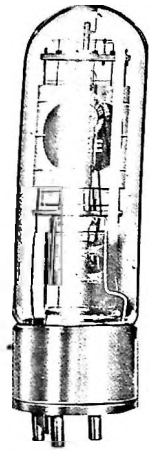
Gas-Filled Thyratrons

Commercial Code	CV Number	American Equivalent	Base	Dimensions		Type	Cathode	Heater		Max. P.I.V.	Max. Peak I_a	Max. Av. I_a
				Overall Length (mm)	Maximum Diameter (mm)			V	A	kV	A	A
2D21	797	2D21	B7G	54	19·1	Tetrode	IH	6·3	0·6	1·3	0·5	0·1
3D22	2851	3D22	B7D	117·5	60	Tetrode	IH	6·3	2·6	1·5	8·0	0·8
5545	2215	GL5545	B4D	228·6	66·7	Triode	OCF	2·5	21	1·5	80·0	6·4
6807	—	6807	B4D	228·6	66·7	Triode	OCF	2·5	21	1·5	80·0	6·4

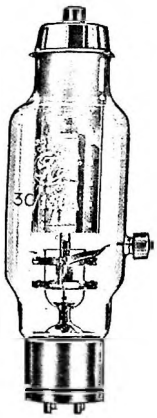
Mercury-Vapour Thyratrons

Commercial Code	CV Number	American Equivalent	Base	Dimensions		Cathode	Filament		Max. P.I.V.	Max. Peak I_a	Max. Av. I_a	Grid Control Ratio (Approx.)
				Overall Length (mm)	Max. Diameter (mm)		V	A	kV	A	A	
3V/340B	—	—	Standard British 4-pin.	176·2	60	OCF	2·5	5	2·5	2	0·5	120
57	5027	FG57	American 4-pin Medium. British 4-pin.	190·4	82·5	IH	5	4·5	1·5	15	3	140
3V/390B	5028	—										
3V/490A	—	FG-105A	B4D	285	66·6	IH	5	10·5	2·5	40	6·4	100
4049GD	—	—	B4F	279·4	63	OCF	4	11	20	5	1·25	700
3V/531E	447	—	Special 3-pin.	435	95·3	OCF	5	20	20	10	2·5	1000
3V/561E	—	—		539·8	133·4	OCF	5	40	20	20	7·5	1000

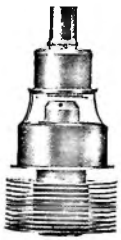
Triodes



4212E



3C/150A



2C39A

3A/167M

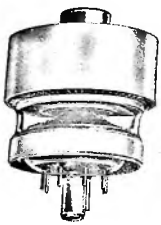
Triodes

Commercial Code	CV No.	American Equivalent	Base	Dimensions: Overall Length (mm)	Dimensions: Max. Diameter (mm)	Cathode	Filament: V	Filament: A	μ	r_a kΩ	g_m mA/V	Max. V_a V	Max. P_a W	Output Power (Class C) W	Max. Frequency Mc/s
3A/167M	5112	437A	B8G	54·8	30·2	IH	6·3	0·45	—	1·0	47	350	6·5	—	—
33A/158M	1884	—	B8G	80·2	30·15	IH	6·3	0·8	14·25	—	3	300	6	15·5 P.P. 14 P.P.	100 A.F.
3B/106J	—	3CPN–10A5	—	69·85	30·5	IH	6·3	1·0	100	4·5	22	3500 pulse	10	2400 peak	1000
33B/152M	1540	—	B9G	82·6	45	IH	6·3	0·92	90	—	18·5	375	15	28 P.P.	300
3B/240M	2214	—	B8G	80·2	30·15	IH	6·3	1·1	90	—	27	375	24	24	200
3B/241M	5116	—	B8G	80·2	30·15	IH	19	0·37	90	—	27	375	24	24	200
4033L	1688	—	Standard 5-pin Br.	125	56	IH	6	1·4	17	2·6	—	600	25	53	45
4304CB	1288	304B	Standard 4-pin Br.	170	72	TTF	7·5	3·2	10	5·0	—	1250	50	90 60	20 100
4242A	25	—	B4F	201·6	59	TTF	10	3·25	12·5	3·1	4	1250	85	142	6
3C/150A	—	—	B4F	252	91·5	TTF	10	3·9	18	3·6	5	2500	150	390	20
4212E	1252	—	Giant 4-pin bayonet.	346	92	TTF	14	6·25	16	1·9	8·4	2000 3000	150 275	300 1400 P.P. 930	60 A.F. 1·5
4357A	27	357	3-pin pressed glass.	205	129	TTF	10	10	30	5·0	—	4000	350	1250	100
2C39A*	2516	2C39A	—	69·85	32	IH	6·3	1·0	100	4·5	22	1000	100	12	2400

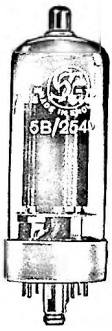
*Forced Air Cooling required.

Tetrodes & Pentodes

5A/170K



4X250B



5B/254M

813

Tetrodes

Commercial Code	CV No.	American Equivalent	Base	Dimensions: Overall Length (mm)	Dimensions: Max. Diameter (mm)	Cathode	Filament: V	Filament: A	Screen Grid μ	gm mA/V	Max. V_a V	Max. V_{g_2} V	Max. P_a W	Output Power (Class C) W	Max. Frequency Mc/s
44A/160M	415	—	B9G	85	45	IH	6·3	1·6	6·5	3·9	400	250	7·5	20 P.P.	100
4X150A*	2519	4X150A	B8F	62	41	IH	6	2·6	5	12	1250	300	150	140	500
4X150D*	3991	4X150D	B8F	62	41	IH	26·5	0·57	5	12	1250	300	150	140	500
4X250B*	2487	4X250B	B8F	62	41	IH	6	2·6	5	12	2000	300	250	410	400
4W300B†	—	4W300B	B8F	89	73	IH	6	2·6	5·2	12	2000	300	300	390	400
4H/181E*	—	—	—	144·5	85·7	TTF	5	22·5	3·5	9	2500	500	1000	820	110
4H/182E*	1883	—	—	140	85·7	TTF	5	22·5	3·5	9	2500	500	1000	820	50

*Forced Air Cooling required.
†Liquid cooling required.

Beam Tetrodes and Pentodes

Commercial Code	CV No.	American Equivalent	Base	Dimensions: Overall Length (mm)	Dimensions: Max. Diameter (mm)	Cathode	Filament: V	Filament: A	Screen Grid μ	gm mA/V	Max. V_a V	Max. V_{g_2} V	Max. P_a W	Performance
5A/102D	1724	329A	Medium Shell Octal	134	46	IH	7·5	0·85	3·5	2·5	180	150	—	3W class A
5A/152M & G*	—	—	B8G	80·2	30·15	IH	6·3	0·46	30	7·5	250	150	5	100mW class A
5A/162D	—	—	Small Wafer Octal	101	33·3	IH	5·5	0·26	—	6	120 10	60 10	0·6	Log. Amp.
5A/163K	1635	—	B9A	55·6	22·2	IH	6·3	0·5	70	15	350	350	3·5	
5A/170K	3998	—	B9A	45·2	22·2	IH	6·3	0·3	50	16·5	210	175	3·3	
5A/180M	—	—	B8G	54·8	30·2	IH	6·3	0·45	50	32	350	175	6	
5B/110M & G*	—	—	B8G	80·2	30·15	IH	6·3	0·8	10	6·5	250	150	11	2W class A
3D21A	2659	3D21A	Medium Shell Octal	122	46	IH	6·3 12·6	0·7 0·35	—	5·5	3500	850	15	H.V. Regulator
5B/254M	428	—	B8G	105·6	30·2	IH	6·3	0·9	9	6	600	300	25	40W at 60 Mc/s
5B/254G	2465	—	Wire-in Loctal	105·6	30·2	IH	6·3	0·9	9	6	600	300	25	40W at 60 Mc/s
5B/255M	391	—	B8G	92·9	30·15	IH	6·3	0·9	9	6	600	300	25	80W at AF class AB_2
5B/256M	499	—	B8G	92·9	30·15	IH	19	0·3	9	6	600	300	25	80W at AF class AB_2
5B/257M	2220	—	B8G	92·9	30·15	IH	12	0·47	9	6	600	300	25	80W at AF class AB_2
5B/258M	2347	—	B8G	105·6	30·15	IH	19	0·3	9	6	600	300	25	80W at AF class AB_2
55B/200A	2799	6252	B7A	86	46	IH	6·3	1·3	8	2·5	600	300	2 × 10	48W at 200 Mc/s
55B/400A	2797	5894	B7A	104·5	46	IH	6·3	1·8	8	4·5	600	300	2 × 20	90W at 200 Mc/s
828	631	828	Ceramic with 5-pin American spacing	195·4	52	TTF	10	3·25	6·5	2·7	1250	400	70	150W at 30 Mc/s
813	26	813	B7D	190·5	65·1	TTF	10	5	8·5	3·75	2000	400	100	275W at 30 Mc/s
4069A	1372	RK28	B5D	249	66	TTF	10	5·4	11	5·4	2000	400	100	210W at 20 Mc/s
5C/450A	1506	—	Special 4-pin	330	108	TTF	10	13	5	5·5	3000	850	450	1kW at 10 Mc/s

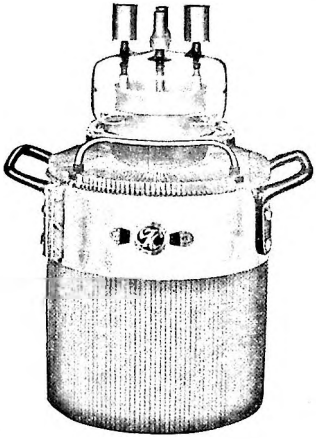
* Flexible leads.

Forced-Air-Cooled Transmitting Valves

3J/162J

3J/170E

3J/210E



3J/261E

Forced-Air-Cooled Triodes

Commercial Code	CV Number	Dimensions		Cathode	Filament		μ	r_a	Max. V_a	Max. P_a	Performance	
		Overall Length (mm)	Max. Diameter (mm)		V	A		kΩ	kV	kW	Output Power kW	Max. Frequency Mc/s
3J/121E	28	358·8	181	TF	16	22	42	12·5	10	1·1	2·8	3
3J/122E	6057	358·8	181	TTF	8·5	21	42	12·5	10	1·1	2·8	3
3J/160E	2245	133	64·3	TTF	10	29	19	1·3	3	1	2	120
3J/162J	—	137·3	63·75	TTF	5	40	20	1·5	3	2	3·15	175
3J/165E	—	220	149·2	TTF	5	45	9	0·31	4	3·5	5·3	15
3J/170E	2905	213·5	147·6	TTF	10	21	17·5	3·2	6	3·5	4·5	50
3J/187E	—	216	121	TTF	5	67	12	0·5	7	4	7 5	70 120
3J/192E	—	229	147·6	TTF	5	66	19	1·7	7	4·5	10	22
3J/202E	—	282·6	149	TTF	5	104	12	0·37	7	6	12·5 (7·5)	50 (80)
3J/210E	—	305	171·5	TTF	5	125	23·5	1·3	8	9	19·5	100
3J/221S	—	495	172·2	TF	22	70	26	3·2	17·5	10	22·5	15
3J/222EW	—	311	172	TTF	8	125	12	0·2	7	10	25	50
3JC/223E	—	260	171·5	TTF	8	200	12	0·2	7	10	25	100
3J/232E	—	311	172	TTF	5	104	24	0·78	13	10	24	50
3J/252EW	—	317·5	203	TTF	8	125	24	0·4	13	12	48	50
3J/253E	—	317·5	203	TTF	8	125	36	0·7	13	12	48	50
3J/260E	2908	385	203·8	TTF	9·5	78	35	1·4	13	20	50	30
3J/261E	—	394	203·8	TTF	9·5	78	35	1·4	8	20	36	70
3J/294E	—	676·3	203·2	TTF	12·5	197	20	0·33	13·5	40	104	2

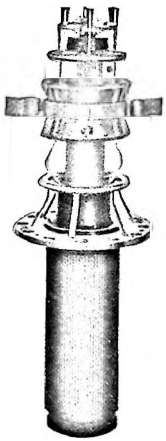
Forced-Air-Cooled Pentode

Commercial Code	CV Number	Dimensions		Cathode	Filament		Screen Grid μ	g_m mA/V	Max. V_a kV	Max. V_{g^2} kV	Max. P_a kW	Performance	
		Overall Length (mm)	Max. Diameter (mm)		V	A						Output Power kW	Max. Frequency Mc/s
5J/180E	445	220	149·2	TTF	9	29	4	5·75	6	1·5	3·5	5·75	30

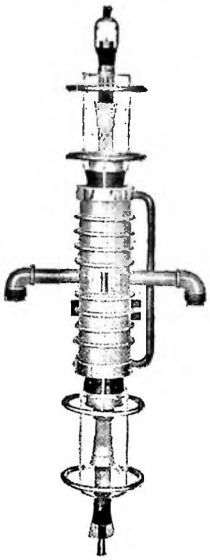
Water-Cooled Transmitting Valves

3Q/294E

3Q/310E



3Q/331E



4030D

Water-Cooled Triodes

Commercial Code	CV Number	Dimensions		Cathode	Filament		μ	r_a	Max. V_a	Max. P_a	Performance		Water Jacket
		Overall Length (mm)	Max. Diameter (mm)		V	A		kΩ	kV	kW	Output Power kW	Max. Frequency Mc/s	
3Q/192E	—	229	92	TTF	5	66	19	1·7	7	4·5	10	22	235/LU3
3Q/202E *3R/202E	—	282·6 282·6	86† 105†	TTF	5	104	12	0·37	7	6	12·5	50	235–LVA–101
3Q/210E	—	305	120	TTF	5	125	23·5	1·3	8	9	19·5	100	235–LVA–103
3Q/221E	—	520	149	TF	22	70	26	3·2	17·5	20	22·5	15	235/LRU8A
3Q/222EW *3R/222EW	—	311 311	96† 134†	TTF	8	125	12	0·2	7	12	25	50	235–LVA–103
3QC/223E *3RC/223E	— —	260 260	— 133	TTF	8	200	12	0·2	7	12	25	100	—
3Q/232E *3R/232E	—	311 311	96† 134†	TTF	5	104	24	0·78	13	12	24	50	235–LVA–103
3Q/253E	—	351	118†	TTF	8	125	36	0·74	13	24	48	50	235–LVA–102
3Q/260E	446	355	130	TTF	9·5	78	35	1·4	13	20	50	30	235/LRU8C
3Q/261E	—	365	130	TTF	9·5	78	35	1·4	8	20	36	70	235/LRU8C
*4030D	1447	1346	—	TF	25	250	36	1·8	17·5	80	98 49	2 22	—
3Q/294E	—	670	203	TTF	12·5	197	20	0·33	13·5	40	104	2	235/LRU12A
3Q/310E	3873	1040	—	TTF	18	200	53	1·0	13	120	135	3	235/LU7A
3Q/331E	—	1040	325	TF	27·5	600	55	1·1	17·5	160	140	22	235/LU6A

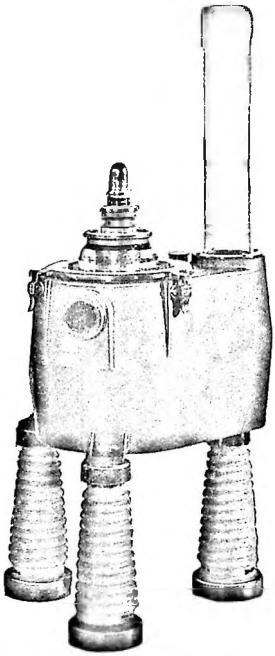
*Water jacket is an integral part of the valve.
†Anode flange diameter.

Vapour-Cooled Transmitting Valves

3Z/253E

3Z/253E

In boiler for use with external condenser 305-LVA-110 (Boiler with internal condenser illustrated on page 20.)



Vapour-Cooled Triodes

Commercial Code	Dimensions		Cathode	Filament		μ	r_a kΩ	Max. V_a kV	Max. P_a kW	Performance	
	Overall Length (mm)	Max. Diameter (mm)		V	A					Output Power kW	Max. Frequency Mc/s
3Z/202E	282·6	177·8†	TTF	5	104	12	0·37	7	6	12·5	50
3Z/222E	311	177·8†	TTF	8	125	12	0·2	7	12	25	50
3ZC/223E	260	177·8†	TTF	8	200	12	0·2	7	12	25	100
3Z/232E	311	177·8†	TTF	5	104	24	0·78	13	12	24	50
3Z/253E	351	177·8†	TTF	8	125	36	0·5	13	24	48	50
3Z/294E	670	203·2	TTF	12·5	197	20	0·33	13·5	40	104	2

†Anode flange diameter.

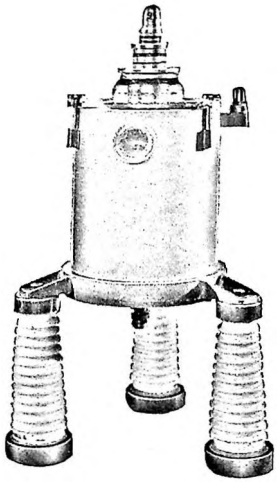
Ancillary Equipment

Valve Code	Boiler Code		External Condenser Code
	For use with :—		
	Internal Condenser	External Condenser	
3Z/202E	305—LVA—107	305—LVA—112	305—LVA—105
3Z/222E	305—LVA—108	305—LVA—111	305—LVA—105
3Z/232E	305—LVA—108	305—LVA—111	305—LVA—105
3Z/252E, 3Z/253E	305—LVA—109	305—LVA—110	305—LVA—106
3Z/294E		305—LVA—113	

Industrial Triodes

3J/187E

3J/202E



3Z/252E

In boiler with integral condenser, 305-LVA-109
(Boiler with external condenser illustrated on page 18.)

3RC/223E

With integral water-jacket

3Z/252E

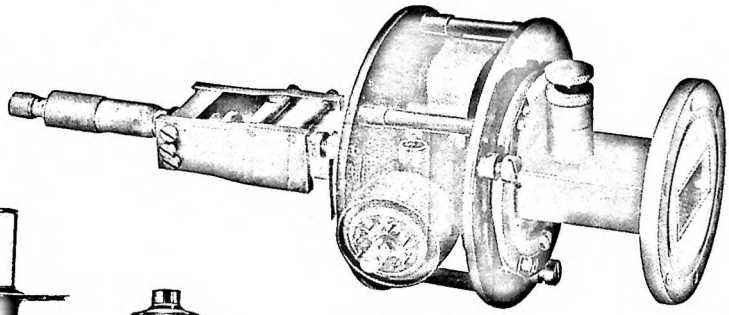
	Commercial Code	Cathode	Dimensions: Overall Length (mm)	Dimensions: Maximum Diameter (mm)	Filament: V	Filament: A	μ	r_a kΩ	Maximum V_a kV	Maximum P_a kW	Performance: Output Power kW	Performance: Maximum Frequency Mc/s
Forced-Air-Cooled	3J/170E	TTF	213·5	147·6	10	21	17·5	3·2	5·7	3·3	4	50
	3J/187E	TTF	216	121	5	67	12	0·5	7	4	7 5	70 120
	3J/192E	TTF	229	147·6	5	66	19	1·7	6·5	4·2	9	22
	3J/202E	TTF	282·6	149	5	104	12	0·4	7	6	12·5	50 (80)
	3J/222E	TTF	311	172	8	125	12	0·2	7	12	25	50
	3JC/223E	TTF	260	171·5	8	200	12	0·2	7	10	25	100
	3J/232E	TTF	311	172	5	104	24	0·78	13	12	24	50
	3J/252E	TTF	317·5	203	8	125	24	0·4	13	12	40	50
Water-Cooled	3Q/192E	TTF	229	92	5	66	19	1·7	6·5	4·2	9	22
	3Q/202E	TTF	282·6	86†	5	104	12	0·4	7	6	12·5	50 (80)
	*3R/202E	TTF	282·6	105†								
	3Q/222E	TTF	311	96†	8	125	12	0·2	7	12	25	50
	*3R/222E	TTF	311	134†								
	3QC/223E	TTF	260		8	200	12	0·2	7	12	25	100
	*3RC/223E	TTF	260	133								
	3Q/232E	TTF	311	96†	5	104	24	0·78	13	12	24	50
	*3R/232E	TTF	311	134†								
	3Q/252E	TTF	351	118†	8	125	24	0·53	13	24	48	50
Vapour-Cooled	3Z/202E	TTF	282·6	177·8†	5	104	12	0·4	7	6	12·5	50 (80)
	3Z/222E	TTF	311	177·8†	8	125	12	0·2	7	12	25	50
	3ZC/223E	TTF	260	177·8	8	200	12	0·2	7	12	25	100
	3Z/232E	TTF	311	177·8†	5	104	24	0·78	13	12	24	50
	3Z/252E	TTF	351	177·8†	8	125	24	0·4	13	24	48	50
	3Z/262E	TTF	350	140	8	300	20	0·33	7	24	40	

*These valves are fitted with integral coiled water jacket.

†Anode flange diameter.
Codes of Water Jacket and Boiler for other valves are given on pages 17 and 19 respectively.

Ring connectors for coaxial types (viz. /187E, /202E, /222E, /232E, /223E, /252E) are available under code 214–LVA–001 A, B and C (set of 3).

Velocity Modulated Tubes



Complete oscillator assembly for V271C/3M showing tuning and output coupling circuits coded 495-LVA-351 and 495-LVA-352 respectively.

V243A/2FS

V241C/1K

V190C/1M

Coaxial Line Oscillators *(Heil Tubes)*

Commercial Code	CV No.	Base	Dimensions: Overall Length (mm)	Dimensions: Max. Dia. (mm)	Frequency Range Gc/s	Min. Power Output W	Resonator Voltage Range V	Cathode Current mA	Min. Electronic Tuning Range Mc/s	Suitable Cavity†	R.F. Output
V190C/1M	—	B8G	114·3	31·8	0·5 –0·95 0·80–1·2	0·25 2	280 180–270	40 80	±1 ±2	495–LVA–202 495–LVA–203	Coaxial Coaxial
V218A/1K	—	B7G	73	20·1	1·70–2·00	0·5	200–300	50	—	—	—
V231C/1K	—	B7G	80	20·1	3·06–3·18	0·04	180–240	45	±8	495–LVA–252	W.G.10
V233A/1K	2190	B7G	73	20·1	2·70–4·20	0·3	190–380	50–65	±1	495–LVA–201	Coaxial
V235A/1K	2221	B7G	73	20·1	2·70–4·00	0·5	190–350	50–65	±1	495–LVA–226	Coaxial
V237C/1K	—	B7G	80	20·1	3·56–3·82	0·35	225–285	45	±4	495–LVA–251	Coaxial
V238A/1K	5292	B7G	88	20·1	3·50–4·30	0·55	260–400	50	±1	495–LVA–251	Coaxial
V239C/1K	5048	B7G	80	20·1	3·78–4·04	0·35	225–285	45	±4	495–LVA–251	Coaxial
V241C/1K	5049	B7G	80	20·1	4·00–4·24	0·35	225–285	45	±4	495–LVA–251	Coaxial
V243A/2FS	5463	*	81	20·1	4·10–4·60	0·75	235–275	65	—	495–LVA–251	Coaxial
V245C/1K	—	B7G	80	20·1	4·40–4·63	0·2	230–265	50	±8·5	439–LTA–32A©	W.G.12A
V246A/2K	485	B7G	89	19·8	4·58–4·86	0·25	200–250	65	±3	495–LVA–251	Coaxial
V247C/1K	—	B7G	80	20·1	4·57–4·75	0·2	230–265	50	±8·5	439–LTA–32A©	W.G.12A
V249C/1K	—	B7G	80	20·1	4·76–5·00	0·2	240–290	50	±8	439–LTA–32A©	W.G.12A

*B7G/F base fitted with P.T.F.E. wiring-in adaptor.
©Cavity 495–LVA–251 is also suitable when coaxial output is preferred.

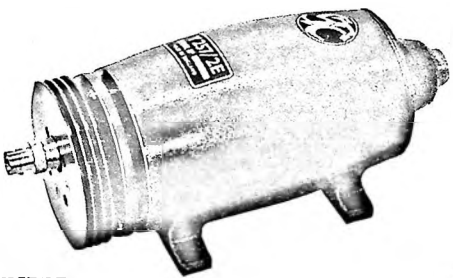
H-Wave Oscillators

Commercial Code	Base	Dimensions: Overall Length (mm)	Dimensions: Max. Dia. (mm)	Frequency Range Gc/s	Min. Power Output W	Resonator Voltage Range V	Cathode Current mA	Min. Electronic Tuning Range Mc/s	Tuning Cavity†	Waveguide Output†
V261C/1M	B8G	134	108	5·85–6·35	0·8	530	60	±8·5	495–LVA–356	495–LVA–355
V265A/1M	B8G	134	108	5·85–7·10	0·2	230–400	50	—	495–LVA–353	495–LVA–354
V266C/1M	B8G	134	108	6·35–6·85	0·8	530	60	±8·5	495–LVA–356	495–LVA–357
V271C/3M	B8G	134	108	6·85–7·35	0·8	530	60	±8·5	495–LVA–351	495–LVA–352
V275C/3M	B8G	134	108	7·25–7·77 7·25–8·3	0·8 0·3	530 590	60 60	±8·5 ±5	495–LVA–351 495–LVA–351A	495–LVA–352 495–LVA–352

†Not an integral part of the valve.

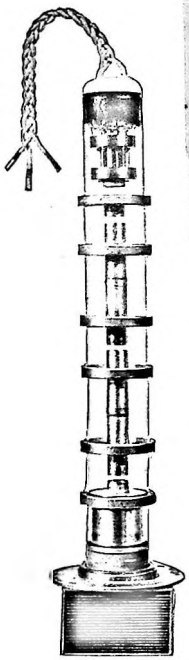
NOTE: Heater voltage for all the above coaxial line and H-wave oscillators: 6·3 volts.

Backward-wave Oscillators & Klystrons



Y257/2E

Z237/1K



Z211/1G

VX7140

Backward Wave Oscillators

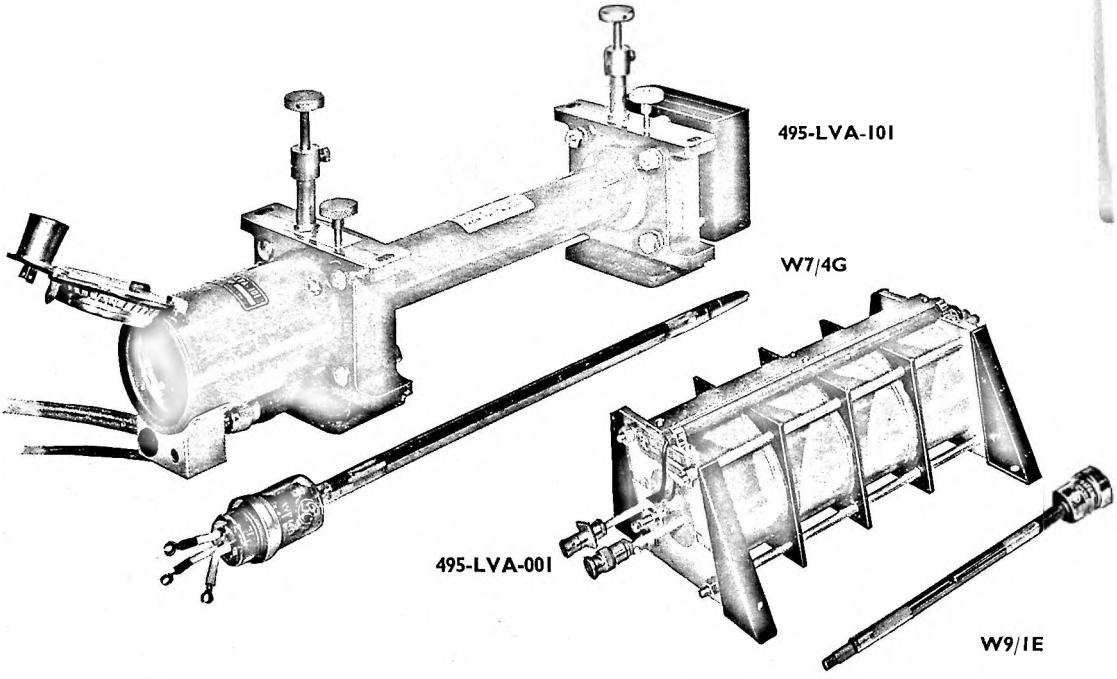
Commercial Code	CV Number	Dimensions: Overall Length (mm)	Dimensions: Maximum Diameter (mm)	Frequency Range Gc/s	Power Output mW	Grid 2 Voltage V	Line Voltage Range V	Integral Focusing Device	R.F. Output
Y257/1E	—	250	153	4– 7·5	20–120	200	270–1500	Solenoid	Coaxial
Y257/2E	—	250	121	4– 7·5	20–120	200	270–1500	P.M.	Coaxial
Y322/1E	—	275	153	18 –26·5	30–200	350†	650–3000	Solenoid	W.G.
Y333/1E	—	255	140	26·5–40	10–80	350†	700–3000	Solenoid	W.G.

Heater Voltage for all types 6·3 V.
†Grid 1 also suitable for amplitude modulation.

Klystrons

Commercial Code	CV No.	Description	Base	Dimensions: Overall Length (mm)	Dimensions: Maximum Diameter (mm)	Heater Volts V	Frequency Range Gc/s	Minimum Power Output W	Resonator Voltage V	Collector or Reflector Voltage V	Resonator Current mA	Minimum Electronic Tuning Range Mc/s
Z211/1G	5314	3-Resonator Pulse Amplifier	Flexible lead	584	127	12·6	·95 –1·25	7000 peak	15 000	15 000	2000 peak	—
Z237/1K	5437	Reflex Oscillator	B9A	76	30	6·3	3·5– 3·54	0·125	300	−90 to −140	50	±21
Z239/1G	2187	Reflex Oscillator	None (Flexible leads)	142	35	6·3	3·6– 4·2	1·0	950– 1100	−150 to −250	60–70	±23

Travelling-wave Tubes



Travelling Wave Tubes

Commercial Code	CV Number	Base	Dimensions: Overall Length (mm)	Dimensions: Maximum Diameter (mm)	Frequency Range Gc/s	Maximum Power Output mW	Low Level Gain dB	Noise Factor dB	Helix Voltage kV	Collector Voltage kV	Cathode Current mA
W5/1G	—	Flying Lead	300	38·6	5·8–7·15‡	10 000	35	27	3·0	2·0	46
W7/3G	5293	Flying Lead	384	38·6	3·6–4·2	10 000	26	27	3·0	3·05	43
W7/4G	—	Flying Lead	440	38·6	3·6–4·2◎ 2·6–3·6★	10 000 10 000	42 38	27 27	3·0 3·0	2·0 2·0	43 43
W9/1E	2499	Special B9A	227	25·5	2·5–4·1	120	35	18	0·42	0·52	4·1
W9/2E	6090	Special B9A	368	23·25	2·5–4·1	10	40	8	0·4	0·6	0·4
W9/3E	—	Special B9A	196	25·5	2·5–4·1	0·1	15	16	0·2	0·3	0·15
W10/3E	—	Special B9A	337	25·5	2·7–3·3§ 2·8–3·7†	3	23	6·5	0·45	0·7	0·4
W13/1D	—	Special Octal	457	29	1·5–3·0	30 000	40	—	1·9	2·0	88

‡With reduced performance the frequency range may be extended to 5–8 Gc/s. A variant of this tube is also available for operation in the frequency bands 4·95–5·55 or 5·4–5·9 Gc/s.

T.W.T. Solenoids

Code	Used with Valve Type	Description	R.F. Connectors
495–LVA–001	W9/1E (CV2499)	Al. Foil Solenoid	CO
§ 495–LVA–003	W10/3E	Copper Foil Solenoid	WG
495–LVA–005	W9/2E (CV6090)	Al. Foil Solenoid	CO
† 495–LVA–006	W10/3E	Al. Foil Solenoid	CO
495–LVA–007	W9/3E	Al. Foil Solenoid	CO
495–LVA–009	W7/3G (CV5295)	Al. Foil Solenoid	WG

T.W.T. Permanent Magnets

Code	Used with Valve Type	Description	R.F. Connectors
◎495–LVA–101	W7/4G	Permanent Magnet Periodic	WG
495–LVA–102	W9/1E (CV2499)	Permanent Magnet	CO
495–LVA–104	W7/3G (CV5293)	Permanent Magnet Periodic	WG
495–LVA–105	W5/1G	Permanent Magnet Periodic	WG
*495–LVA–106	W7/4G	Permanent Magnet Periodic	CO

Tetrode Pulse Modulators

3D21A

4B/603E

Commercial Code	CV Number	American Equivalent	Base	Dimensions: Overall Length (mm)	Dimensions: Max. Diameter (mm)	Cathode	Filament: V	Filament: A	Max. V_a kV	Max. Peak I_a A	Max. P_a W	Code of Mechanically Reliable Version
P535/1E	398	715B	B4A	149·23	65·09	IH	26	2	15	15	60	4B/603E
P552/1E	427	5D21	B4A	149·23	65·09	IH	26	2	20	15	60	4B/602E
3D21A	2659	3D21A	Medium Shell Octal	122·2	46	IH	6·3 or 12·6	1·7 or 0·85	3·5	—	15	—

3B/106J

Disc Seal Triodes

Commercial Code	CV No.	American Equivalent	Base	Dimensions: Overall Length (mm)	Dimensions: Max. Diameter (mm)	Cathode	Filament: V	Filament: A	μ	r_a kΩ	g_m mA/V	Max. V_a V	Max. P_a W	Output Power (Class C) W	Max. Frequency Mc/s
2C39A*	2516	2C39A	—	69·85	32	IH	6·3	1·0	100	4·5	22	1000	100	12	2400
3B/106J	—	3CPN-10A5	—	69·85	30·5	IH	6·3	1·0	100	4·5	22	3500 pulse	10	2400 peak	1000

*Forced Air Cooling required.

T2H/60JA

Thermocouples

Commercial Code	Output at Cap	Nominal Resistance of Couple	Maximum Safe Heater Current	Heater Current required to produce in couple an open circuit E.M.F. of 15 mA	Frequency Range
T2H/60JA T2H/60JB	Positive to Disc Negative to Disc	6 ohms	60 mA	38 mA	300–6000 Mc/s

Cold Cathode Voltage Stabilisers

G1000/1G

G400/1K

G55/1K

G180/2M

VR75/30

Voltage Stabilisers

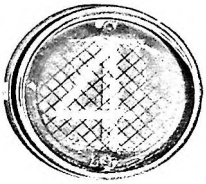
Commercial Code	CV Number	American Equivalent	Base	Dimensions		Maximum Striking Voltage	Nominal Stabilising Voltage	Max. Cathode Current	Regulation	
				Overall Length (mm)	Maximum Diameter (mm)	V	V	mA	Voltage V	Current mA
G50/2G	2208	—	None*	40	10	90	50	3	−0·3 +1·0	0·3–1·0 1–3
G55/1K	5298	—	B7G	66·7	19·1	90	55	30	3	2–30
VR75/30	3798	OA3	Small Shell Octal.	104·8	39·7	105	75	40	3 4·5	5–30 5–40
G75/3G	4030	—	Flying Lead Loctal.	80·2	30·2	115	75	60	2·5 5·25	5–30 5–60
VR105/30	686	OC3	Small Shell Octal.	104·8	39·7	127	108	40	1·0 1·3	5–30 5–40
OB2	1833	OB2	B7G	66·7	19·1	127	108	30	1·5	5–30
VR150/30	216	OD3	Small Shell Octal.	104·8	39·7	180	150	40	1·5	5–30
OA2	1832	OA2	B7G	66·7	19·1	180	150	30	2·0	5–30
G180/2G & M	395	—	B8G	80·2	30·15	180	150	45	1·0	5–45
G400/1K	2194	—	B7G	54	19·1	400	306	4	−1	2–4
G400/2G	4047	—	B7G/F	47·6	19·1	400	306	4	−1	2–4

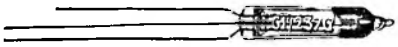
*Tinned leads for soldering directly into circuit.

Corona Stabilisers

Commercial Code	CV Number	American Equivalent	Base	Dimensions		Max. Breakdown Voltage	Nominal Stabilising Voltage	Maximum Cathode Current	Regulation V for 50 μA Change
				Bulb Length (mm)	Maximum Diameter (mm)	V	V	μA	
G500/1G	—	—	Flying Lead	45	10·5	550	500	55	10
G1000/1G	—	—				1100	1000	100	25
G1500/1G	—	—				1650	1500	100	30
G1800/1G	—	—				1980	1850	100	40

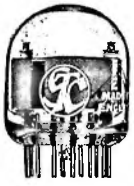
Cold Cathode Trigger, and Indicator Tubes





G1/237G

G1/371K



GN–3

GS–1

GN–2

Trigger Tubes

Commercial Code	CV Number	American Equivalent	Base	Dimensions		Type	Minimum Main Gap Striking	Nominal Main Gap Maintaining	Nominal Control Gap Striking	Maximum Cathode Current
				Overall Length (mm)	Maximum Diameter (mm)		V	V	V	mA
G1/237G	—	—	Flying lead	40	12·7	Triode	200	70	75	1·5
G1/238G	—	—	Flying lead	40	12·7	Triode	200	70	78	1·5
G1/371K	2224	—	B7G	54	19·1	Primed Trigger Triode	360	175	190	10
G150/2D	413	—	Small Octal Wafer with Metal Shell	81	33·3	Triode	150	68	70	30
G240/2D	2174	—	ditto	92·1	33·3	Triode	230	90	75	30

Indicator and Tubes

Commercial Code	CV Number	Base	Dimensions		Type	Nominal Anode Supply Voltage	Extinction Voltage	Minimum Cathode Output	Cathode Current Range
			Overall Length (mm)	Maximum Diameter (mm)		V	V	V	mA
GN–2	—	B12A	61·9	43·7	Numeral Indicator	200+	110	—	2·5 to 5
GN–3	5277	B13B	35	27·4	Numeral Indicator	170+	100	—	1·5 to 2·5
GS–1	—	B9A/D	54·7	22·2	Symbol Indicator + −	200+	110	—	1 to 2

SPECIAL DEVICES
CV CODES
EQUIVALENT CODES

K50/2L

Vacuum Capacitors

Commercial Code	Dimensions		Capacity	Peak R.F. Voltage	Maximum R.F. Current	Maximum Frequency
	Length (mm)	Diameter (mm)	pF	kV	A (r.m.s.)	Mc/s
K12/2L	170	65	12 ± 10%	32	28	20
K16/2L	170	65	16 ± 10%	32	28	20
K25/2L	170	65	25 ± 10%	32	28	20
K50/2L	170	65	50 ± 10%	32	28	20
K100/2L	170	65	100 ± 10%	28	28	20

L102/1K

Resistance Lamps

Code	Purpose	Dimensions		Base	Current	Operating Conditions			Sensitivity	Limit Ratings	
		Overall Length (mm)	Maximum Diameter (mm)		mA	Voltage V	Resistance Ω	Diss. W	Ω/mW	Voltage V	Diss. W
B1C/1E (CV433)	Ballast	78·6	22·2	End Caps	880 to 1070	3 to 9·5	—	—	—	—	—
L100/1G	Tungsten Filament Circuit Element	25·4	10·16	Flying Leads	5 15	0·05 0·4	—	—	—	6·0	—
L101/1G	Bolometer for Power Measurement up to 5000 Mc/s	25·65	4·87	Flying Leads	10	—	70 95	1·0	0·013 to 0·036	—	1·0
L102/1K	Double Filament Protective Device	55·6	22·2	B9A	20 60	—	80 180	—	—	85 (Parallel) 170 (Series)	—

M103/3G

Manometers

Code	Gauge Type	Dimensions			Glass	Filament Rating		Sensitivity $\frac{I_c}{I_g}$ per Torr	Pressure Torr†
		Bulb Length (mm)	Overall Diameter (mm)	Tabulation Diameter (mm)		V	A		
M103/3G	Ionisation	205	39	11	C9	6	2·4	10	10^{-3} to 10^{-7}
M150/1E	Bayard and Alpert	102	85·7	16	C9	6	5	20	10^{-3} to 10^{-11}
M151/1E*	Bayard and Alpert	102	85·7	16	C9	6	5	20	10^{-3} to 10^{-11}
						V	Ω		
M130/1D	Pirani	93·7	33·3		Soda			—	10^{-1} to 10^{-3}
					Lime	7	12·5		

*M151/1E is also Evaporation Pump.
†(i.e. mm of mercury pressure).

S105/1K

Thermal Delay Switches

Commercial Code	CV Number	Base	Dimensions		Heater		Delay Time at 20°C. (sec.)	
			Overall Length (mm)	Maximum Diameter (mm)	V	A	Min.	Max.
VLS631	SH342	B7G	54	19·1	6·3	0·5	44	66
S102/1G	—	B7G/F	47·6					
S103/1K	—	B7G	54	19·1	27	0·115	36	54
S104/1K	—	B7G	54	19·1	6·3	0·5	25	35
S105/1K	—	B7G	54	19·1	27	0·115	20	30
S106/1K	—	B7G	54	19·1	19	0·165	40	66
S107/1K	—	B7G	54	19·1	6·3	0·5	8	15

C.V. Codes of STC Current Types

CV Code	STC Code	CV Code	STC Code	CV Code	STC Code
5	4049D	413	G150/2D	797	2D21
25	4242A	415	44A/160M	1062	4304CB
26	813	427	P552/1E	1220	4033L
27	4357A	*428	5B/254M	1252	4212E
28	3J/121E	433	B1C/1E	1288	4304CB
32	866A (2V/400A)	445	5J/180E	1372	4069A
216	VR150/30	446	3Q/260E	1420	2V/531E
234	V230A/1K	447	3V/531E	1447	4030D
299	V230A/1K	485	V246A/2K	1449	872A (4064B)
315	4304CB	499	5B/256M	1506	5C/450A
*391	5B/255M	536	4120AA	1540	33B/152M
395	G180/2M	631	828	1619	4212E
398	P535/1E	686	VR105/30	1630	5C/450A

*Inter-services, Preferred type.

CV Code	STC Code	CV Code	STC Code	CV Code	STC Code
1635	5A/163K	2329	4004B	4030	G75/3G
1688	4033L	2347	5B/258M	4047	G400/2G
1724	5A/102D	2399	2G/473C	5027	57
1832	OA2	2422	V246C/4K	5028	3V/390B
1833	OB2	*2465	5B/254G	5048	V239C/1K
*1835	3B28	2499	W9/1E	5049	V241C/1K
1883	4H/182E	2516	2C39A	5112	3A/167M
1884	33A/158M	*2518	4B32	5116	3B/241M
2029	G180/2G	2519	4X150A	5277	GN-3
2174	G240/2D	2659	3D21A	5292	V238A/1K
2187	Z239/1G	2797	55B/400A	5293	W7/3G
2190	V233A/1K	*2799	55B/200A	5298	G55/1K
2194	G400/1K	2851	3D22	5314	Z211/1G
2208	G50/2G	2905	3J/170E	5437	Z237/1K
2214	3B/240M	2908	3J/260E	5463	V243A/2FS
2215	5545	3587	705A	6057	3J/122E
2220	5B/257M	3798	VR75/30	6058	3Q/122E
2221	V235A/1K	3873	3Q/310E	6090	W9/2E
2224	G1/371K	3991	4X150D		
2245	3J/160E	3998	5A/170K		

*Inter-services, Preferred type.

STC Current Types with C.V. Codes

STC Code	CV Code	STC Code	CV Code	STC Code	CV Code
OA2	1832	872A (4064B)	1449	2V/531E	1420
OB2	1833	4004B	2329	3A/167M	5112
2C39A	2516	4030D	1447	33A/158M	1884
2D21	797	4033L	1220	3B/240M	2214
*3B28	1835		1688	3B/241M	5116
3D21A	2659	4049D	5	33B/152M	1540
3D22	2851	4069A	1372	5B/256M	499
*4B32	2518	4120AA	536	3J/121E	28
*4X150A	2519	4212E	1252	3J/122E	6057
4X150D	3991		1619	3J/160E	2245
*4X250B	2487	4242A	25	3J/170E	2905
57	5027	4304CB	315	3J/260E	2908
705A	3587		1062	3Q/122E	6058
813	26	4357A	27	3Q/260E	446
828	631	5545	2215	3Q/310E	3873
866A(2V/400A)	32	2G/473C	2399		

* Inter-services, Preferred type.

STC Code	CV Code	STC Code	CV Code	STC Code	CV Code
3V/390B	5028	5J/180E	445	V235A/1K	2221
3V/531E	447	B1C/1E	433	V238A/1K	5229
44A/160M	415	G1/371K	2224	V239C/1K	5048
4H/182E	1883	G50/2G	2208	V241C/1K	5049
5A/102D	1724	G55/1K	5298	V243A/2FS	5463
5A/163K	1635	G75/3G	4030	V246A/2K	485
5A/170K	3998	G150/2D	413	V246C/4K	2422
*5B/254M	428	G180/2G	2029	VR75/30	3798
*5B/254G	2465	G180/2M	395	VR105/30	686
*5B/255M	391	G240/2D	2174	VR150/30	216
5B/257M	2220	G400/1K	2194	W7/3G	5293
5B/258M	2347	G400/2G	4047	W9/1E	2499
55B/200A	2799	GN-3	5277	W9/2E	6090
55B/400A	2797	P535/1E	398	Z211/1G	5314
5C/450A	1506	P552/1E	427	Z237/1K	5437
	1630	V233A/1K	2190	Z239/1G	2187

*Inter-services, Preferred type.

STC Equivalents

Type	STC Equivalents		Type	STC Equivalents	
	Code	Reference		Code	Reference
OA2	OA2	G150/4K	4B32	4B32	2G/472B
OA3	VR75/30	G75/2D	4X150A	4X150A	4H/135M
OA3/VR75	VR75/30	G75/2D	4X150D	4X150D	4H/135M
			4X250B	4X250B	4H/160M
OB2	OB2	G108/1K			
		G75/4K	5D21	P552/1E	4B/602E
OC3	VR105/30	G105/1D	5Z3	4274A	22S/200A
OD3	VR150/30	G150/3D	6BD4A	6BD4A	3B/254D
			6P12	5A/162D	5A/162D
OM5	5A/157D	5A/157D		5A/166D	5A/166D
2C34	4074A	33A/138A	8A1	4046A	5A/128B
2C39A	2C39A	3H/151J			
2D21	2D21	4G/280K	12E12	P535/1E	4B/601E
3B28	3B28	2G/402A	20A3	2D21	4G/280K
3D21A	3D21A	5B/152D			
3D22	3D22	4G/401A	83	83	22V/310A

Type	STC Equivalents		Type	STC Equivalents	
	Code	Reference		Code	Reference
101D	3A/141A	3A/141A	357A	4357A	3C/351H
101L, 101M	3A/107A	3A/107A	705A	705A	2T/450E
102D	3A/142A	3A/142A	715B	P535/1E	4B/601E
104D	3A/144A	3A/144A			
108C1	OB2	G108/1K	804	4052A	5B/600A
120A	4120A	B4B/1A	813	813	5C/100A
121A	4121A	B8B/1A	828	828	5B/700A
150C2	OA2	G150/4K	866	866A	2V/400A
150C3	VR150/30	G150/3D	866A	866A	2V/400A
150C4	OA2	G150/4K	872/872A	872A	2V/471A
205D	3B/151A	3B/151A			
205E	3B/151A	3B/151A	3017B	4017B	2V/401C
212E	4212E	3C/270A	3033A	4033L	3B/252B
228A	4228A	3Q/150E	3052A	4052A	5B/600A
242A, B & C	4242A	3B/850A	3069A	4069A	5C/101A
270A	4270A	3C/350E	3074A	4074A	33A/138B
274A	4274A	22S/200A	3077A	4077A	2V/490C
276A	4242A	3B/850A	3078A	2V/531E	2V/531E
278A	4278A	4C/800E	3079A	2V/561E	2V/561E
282A	4282B	4B/700A	3080A	4080A	2V/590E
300A	4300A	3B/400A	3081A	4081A	3Q/212E
313C	4313C	G150/1A			
343A	4009B	3Q/220E	3313C	4313C	G150/1A

STC Equivalents

Type	STC Equivalents		Type	STC Equivalents	
	Code	Reference		Code	Reference
3801A	3V/531E	3V/531E	AX228	2G/473C	2G/473C
3802A	3V/561E	3V/561E	AX230	4B32	2G/471B
3803	4080GA	3V/590E			
3852A	2C39A	3H/151J	BR152B	3J/121E	3J/121E
3861B	4X150A	4H/135M	BR1129	3J/162J	3J/162J
3887	G1/236G	G1/236G	BR1138	3J/122E	3J/122E
			BT5	57	3V/390A
5545	5545	3G/501A			
5559	57	3V/390A	C143	813	5C/100A
6305	2T/270K	2T/270K	C200	3C/150A	3C/150A
6688	5A/170K	5A/170K	C1134	55B/200A	55B/200A
6693	2V/520A	2V/520A	CT1–500	3V/340B	3V/340B
6807	6807	3G/502A	CT1–2500	57	3V/390A
8019	4304CB	3B/504B	DCG5/3000GB	872A	2V/471A
			DCG6/18	2V/520A	2V/520A
A232	705A	2T/450E	DCX4/1000	3B28	2G/402A
AF350	4212E	3C/270A	DCX4/5000	4B32	2G/472B
AH221	4049D	2V/500C			
AR300	4212E	3C/270A	DET12	4304CB	3B/504B
AX224	3B28	2G/402A	DET19	4074A	33A/138A

Type	STC Equivalents		Type	STC Equivalents	
	Code	Reference		Code	Reference
DLS19	VLS631	S102/1K	F872A	872A	2V/471A
			FG57	57	3V/390A
DR715C	P535/1E	4B/601E	GD150A/S	VR150/30	G150/3D
DR813	813	5C/100A	GD150M/S	OA2	G150/4K
DR872A	872A	2V/471A	GL572	2C39A	3H/151J
DQ2	866A	2V/400A	GL872A	872A	2V/471A
DQ4	872A	2V/471A	GL813	813	5C/100A
DQ4A	4064A	2V/471C	GU21	4049D	2V/500C
			GXU1	3B28	2G/402A
DX2	3B28	2G/402A	GXU2	4B32	2G/472B
			GXU3	2G/473C	2G1473C
E180F	5A/170K	5A/170K	HF200	3C/150A	3C/150A
E1197	4049D	2V/500C	HG25	866A	2V/400A
E1954	4242A	3B/850A	HLA2	3B/101B	3B/101B
E1955	2D21	4G/280K	HR2	2T/270K	2T/270K
E1956	2T/270K	2T/270K			
			KD21	VR75/30	G75/2D
EN91	2D21	4G/280K	KD24	VR105/30	G105/1D
			KD25	V150/30	G150/3D
ESP450	5C/450A	5C/450A			
ES85	4242A	3B/850A	ML872A/87L	872A	2V/471A
ESU103	3B28	2G/402A	MW100	4242A	3B/850A
ESU200	4049D	2V/500C	MY3/275	4212E	3C/270A
ESU866	866A	2V/400A			
ESU872	872A	2V/471A	N1–1	GN–1	GN–1

STC Equivalents

Type	STC Equivalents		Type	STC Equivalents	
	Code	Reference		Code	Reference
P120–1a	813	5C/100A	RG4–1250	4049D	2V/500C
PA1	3B/100B	3B/100B	RG4–3000	2V/520A	2V/520A
PL21, PL2D21	2D21	4G/280K	RK20	4052A	5B/600A
PSN1	P535/1E	4B/601E	RK25	4061A	5B/100A
			RK28	4069A	5C/101A
QB2/250	813	5C/100A	RK34	4074A	33A/138A
QEL1/150	4X150A	4H/135	RK813	813	5C/100A
QS75/40	VR75/30	G75/2D	RK872A	872A	2V/471A
QS150/40	VR150/30	G150/3D	RR3–250	3B28	2G/402A
QS150/45	G180/2M	G180/2M	RR3–1250	4B32	2G/472B
QS1205	VR75/2D	G75/2D	RR3–1250A	2G/473C	2G/473C
QS1206	VR105/30	G105/1D	RS–384	5C/450A	5C/450A
QS1207	OA2	G150/4K	RS–566	3Q/310E	3Q/310E
QS1208	OB2	G108/1K	RV–18	3C/150A	3C/150A
QV1–150A	4X150A	4H/135M			
QV2–250B	4X250B	4H/160M	SU–44	2T/270K	2T/270K
QY2–100	813	5C/100A	TD1–100A	2C39A	3H/151J
			TGRB	872A	2V/471A
R10	2T/270K	2T/270K	TH5031B	872A	2V/471A
RG3–250A	866A	2V/400A	TH5221V/B	3B28	2G/402A
RG3–1250GC	4049GD	3V/500A	TSW50	4304CB	3B/504B

Type	STC Equivalents		Type	STC Equivalents	
	Code	Reference		Code	Reference
TT10	813	5C/100A	VT–139	VR150/30	G150/3D
TT15	44A/160M	44A/160M	VT–144	813	5C/100A
TX2/6	5545	3G/501A	VT–154	828	5B/700A
TY1–50	4304CB	3B/504B	VT–224	4074A	33A/138A
			VT–260	VR75/30	G75/2D
UE813	813	5C/100A			
UE872A, UE892	872A	2V/471A	WL631	57	3V/390A
			WL813	813	5C/100A
UE966	866A	2V/400A	WL872A	872A	2V/471A
UE966A	866A	2V/400A	WRM8131	3Q/310A	3Q/310A
UE972	872A	2V/471A	WT–210–0027	872A	2V/471A
UN312E	4212E	3C/270A	WT–262	866A	2V/400A
			WT–269	VR105/30	G105/1D
V1505	4212E	3C/270A	WT–294	VR150/30	G150/3D
V1928	2T/270K	2T/270K	WT–606	2D21	4G/280K
			WTT141	VR75/30	G75/2D
VR75	VR75/30	G75/2D			
VR75/30	VR75/30	G75/2D	XG1–2500	57	3V/390A
VR105	VR105/30	G105/1D	XG2–6400	3V/490A	3V/490A
VR105/30	VR105/30	G105/1D			
VR150/30	VR150/30	G150/3D	XR1–6400	5545	3G/501A
VT46	866A	2V/400A	XR1–6400A	6807	3G/502A
VT46A	866A	2V/400A			
VT61	4074A	33A/138A	ZP–572	2C39A	3H/151J

NOTES

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2610